IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method to create a topology map of a wireless network, wherein said wireless network includes a plurality of network devices, wherein said network devices include mobile network devices provided for direct wireless communication in-between each mobile network device ~~other~~, and wherein said topology map indicating the quality of connectivity of each of said plurality of network devices with all other network devices of said plurality of network devices, comprising:

performing a measurement phase in which a calibration signal is successively broadcasted by each network device and in which all respective other network devices receiving said calibration signal directly from a broadcasting network device measure the received signal quality;

performing a reporting phase in which the measurement results are directly wirelessly transmitted from each network device to the network device creating said topology map; and

performing a creating phase in which said topology map of the network is created within the network device creating said topology map on basis of all received measurement results.

Claim 2 (Previously Presented): The method according to claim 1, wherein said calibration signal is transmitted in a dedicated control channel.

Claim 3 (Previously Presented): The method according to claim 1, wherein said measurement results are reported in a respective dedicated control channel.

Claim 4 (Previously Presented): The method according to claim 1, wherein said calibration signal is transmitted with the maximum allowed transmit power level.

Claim 5 (Previously Presented): The method according to claim 1, wherein said topology map is updated when a new network device joins the network.

Claim 6 (Previously Presented): The method according to claim 1, wherein said topology map is updated after a predetermined amount of time.

Claim 7 (Previously Presented): The method according to claim 1, wherein said topology map is stored in a central controller of said wireless network.

Claim 8 (Previously Presented): The method according to claim 1, wherein said topology map is broadcasted in the whole network.

Claim 9 (Previously Presented): The method according to claim 1, wherein only the parts of the topology map related to a specific network device are transmitted to said specific network device.

Claim 10 (Previously Presented): The method according to claim 1, wherein said calibration signal is transmitted using an omni-directional antenna.

Claim 11 (Previously Presented): The method according to claim 1, wherein the contents of the topology map are codes that are mapped to receive power values.

Claim 12 (Previously Presented): <u>The method</u> according to claim 1, <u>wherein</u> said measurement phase and/or reporting phase is initiated by the network device creating said topology map.

Claim 13 (Currently Amended): A network device for a wireless network, wherein said wireless network includes a plurality of network devices, wherein said network devices include mobile network devices provided for direct wireless communication in-between each <u>mobile network device</u> ~~other~~, and wherein a topology map indicating the quality of connectivity of each network device of the wireless network with all other network devices in said wireless network is created, comprising:

means for broadcasting a calibration signal <u>directly</u> to the other network devices;

means for measuring a power level of ~~received~~ calibration signals <u>received directly from a broadcasting network device</u>;

means for internally storing results of said measurement; and

means for <u>directly</u> wirelessly transmitting said measurement results to another network device.

Claim 14 (Previously Presented): The network device according to claim 13, wherein said functions are performed on demand of another network device or on an internal demand.

Claim 15 (Previously Presented): The network device according to claim 13, further comprising:

a calibration decoder that initiates the broadcast of a calibration signal and the measurement of the reception quality of one or more incoming calibration signals upon reception of a measurement control signal.

Claim 16 (Previously Presented): The network device according to claim 15, wherein said calibration decoder initiates the transmission of one or more measurement results upon reception of a reporting control signal.

Claim 17 (Previously Presented): The network device according to claim 13, further comprising:

a report encoder that receives one or more signal quality indication signals and encodes therefrom a signal quality control signal to be transmitted to said other network device.

Claim 18 (Currently Amended): A ~~The~~ network device ~~configured and adapted~~ for wireless communication in a wireless network including a plurality of network devices, wherein a topology map indicating the quality of connectivity of each network device of the wireless network with all other network devices in said wireless network is created, comprising:

means ~~configured and adapted~~ for generating and <u>directly</u> wirelessly communicating respective control signals for initiating a measurement phase and initiating a reporting phase; and

means ~~configured and adapted~~ for performing a creation of a topology map indicative of the quality of wireless connectivity of each network device of said wireless network with all other network devices in said wireless network on the basis of measurement results <u>directly</u> received during the reporting phase.

Claim 19 (Canceled).

Claim 20 (Currently Amended): A method to create a topology map of a wireless network including a plurality of network devices, wherein said network devices include mobile network devices provided for direct wireless communication in-between each <u>mobile network device</u> other, said topology map indicating the quality of connectivity of each of said plurality of network devices with all other network devices of said plurality of network devices, comprising:

performing a measurement phase in which a calibration signal is successively broadcasted by each network device and in which all respective other network devices receiving said calibration signal <u>directly from a broadcasting network device</u> measure the received signal quality;

performing a reporting phase in which the measurement results are <u>directly</u> transmitted from each network device to the network device creating said topology map; and

performing a creating phase in which said topology map of the network is created within the network device creating said topology map on the basis of all received measurement results.

Claim 21 (Previously Presented): The method according to claim 20, wherein said calibration signal is transmitted in a dedicated control channel.

Claim 22 (Previously Presented): The method according to claim 20, wherein said measurement results are reported in a respective dedicated control channel.

Claim 23 (Previously Presented): The method according to claim 20, wherein said calibration signal is transmitted with the maximum allowed transmit power level.

Claim 24 (Previously Presented): The method according to claim 20, wherein said topology map is updated when a new network device joins the network.

Claim 25 (Previously Presented): The method according to claim 20, wherein said topology map is updated after a predetermined amount of time.

Claim 26 (Previously Presented): The method according to claim 20, wherein said topology map is stored in a central controller of said wireless network.

Claim 27 (Previously Presented): The method according to claim 20, wherein said topology map is broadcasted in the whole network.

Claim 28 (Previously Presented): The method according to claim 20, wherein only the parts of the topology map related to a specific network device are transmitted to said specific network device.

Claim 29 (Previously Presented): The method according to claim 20, wherein said calibration signal is transmitted using an omni-directional antenna.

Claim 30 (Previously Presented): The method according to claim 20, wherein said measurement phase and/or reporting phase is initiated by the network device creating said topology map.

Claim 31 (Currently Amended): A method to create a topology map of a wireless network including a plurality of network devices, wherein said network devices include

mobile network devices provided for direct wireless communication in-between each <u>mobile network device</u> ~~other~~, wherein network communication between said plurality of network devices is effected solely as wireless communication and wherein said topology map indicating the quality of connectivity of each of said plurality of network devices with all other network devices of said plurality of network devices, comprising:

performing a measurement phase in which a calibration signal is successively broadcasted by each network device and in which all respective other network devices receiving said calibration signal <u>directly from a broadcasting network device</u> measure the received signal quality;

performing a reporting phase in which the measurement results are <u>directly</u> transmitted from each network device to the network device creating said topology map; and

performing a creating phase in which said topology map of the network is created within the network device creating said topology map on the basis of all received measurement results.

Claims 32-35 (Canceled).

Claim 36 (New): The method according to claim 27, wherein said topology map is stored by each network device with an associated time stamp.